AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for the synthesis of ferrate, comprising

at least one container ~~capable of~~ for holding starting materials;

a measuring ~~unit capable of~~ device for measuring an amount of said starting materials;

a mixer ~~capable of~~ for mixing starting materials;

a reaction chamber; ~~and~~

a temperature control unit connected to said reaction chamber through a valve wherein said ferrate flows through said temperature control unit when said valve is open, and said ferrate does not flow through said temperature control unit when said valve is closed; and

a drain;

wherein said drain is located at a site proximal to the site of use of said ferrate.

2. (Original) The device of claim 1, wherein said plurality of containers comprises three containers.

3. (Original) The device of claim 2, wherein one container is for each of an iron salt, an oxidizing agent, and a base.

4. (Original) The device of claim 3, wherein said iron salt is selected from the group consisting of ferric nitrate, ferrous nitrate, ferric chloride, ferrous chloride, ferric bromide, ferrous bromide, ferric sulfate, ferrous sulfate, ferric phosphate, ferrous phosphate, ferric hydroxide, ferrous hydroxide, ferric oxides, ferrous oxides, ferric hydrogen carbonate, ferrous hydrogen carbonate, ferric carbonate, and ferrous carbonate.

5. (Original) The device of claim 3, wherein said iron salt is ferric chloride.

6. (Original) The device of claim 3, wherein said oxidizing agent comprises at least one of the following: a hypohalite ion, a halite ion, a halate ion, a perhalate ion, ozone, potassium peroxymonopersulfate, potassium monopersulfate, halogen, a peroxide, a superoxide, a peracid, a salt of a peracid, and Caro's acid.

7. (Original) The device of claim 3, wherein said oxidizing agent is sodium hypochlorite.

8. (Original) The device of claim 3, wherein said base is selected from the group consisting of hydroxide, oxide, sulfonate, sulfate, sulfite, hydrosulfide, phosphate, acetate, bicarbonate, and carbonate.

9. (Original) The device of claim 3, wherein said base is sodium hydroxide.

10. (Original) The device of claim 1, wherein said measuring unit comprises a flowmeter.

11. (Original) The device of claim1, wherein said measuring unit comprises a scale by which the weight of each starting material is measured prior to its introduction into said reaction chamber.

12. (Original) The device of claim1, wherein said mixer comprises at least one eductor.

13. (Currently Amended) The device of claim 1, wherein said mixer comprises at least one mechanical mixer ~~304~~.

14. (Original) The device of claim 1, wherein said reaction chamber comprises a reaction vessel and a reaction loop.

15. (Original) The device of claim 1, further comprising a concentration measuring unit in said reaction chamber.

16. (Original) The device of claim 15, wherein said concentration measuring unit is a spectrophotometer.

17. (Cancelled) The device of claim 1, further comprising a temperature control unit.

18. (Currently Amended) The device of claim ~~17~~ 1, wherein said temperature control unit comprises a heat exchanger.

19. (Currently Amended) A device for the synthesis of ferrate, comprising

at least one container ~~capable of~~ for holding starting materials;

means for measuring an amount of said starting materials;

means for mixing said starting materials;

a reaction chamber; ~~and~~

means for controlling temperature of said ferrate, wherein said means for controlling temperature is connected to said reaction chamber through a valve and wherein said ferrate flows through said means for controlling temperature when said valve is open, and said ferrate does not flow through said means for controlling temperature when said valve is closed; and

a drain;

wherein said drain is located at a site proximal to the site of use of said ferrate.

20. (Currently Amended) A device for the synthesis of ferrate, comprising

means for holding starting materials;

means for measuring an amount of said starting materials;

means for mixing said starting materials;

means for reacting said starting materials to produce said ferrate; ~~and~~

a temperature control unit connected to said reaction chamber through a valve wherein said ferrate flows through said temperature control unit when said valve is open, and said ferrate does not flow through said temperature control unit when said valve is closed; and

means for removing said ferrate from said device;

wherein said means for removing is located at a site proximal to the site of use of said ferrate.

21. (New) A device for the synthesis of ferrate, comprising

means for holding starting materials;

means for measuring an amount of said starting materials;

means for mixing said starting materials;

means for reacting said starting materials to produce said ferrate; ~~and~~

means for controlling temperature of said ferrate, wherein said means for controlling temperature is connected to said reaction chamber through a valve and wherein said ferrate flows through said means for controlling temperature when said valve is open, and said ferrate does not flow through said means for controlling temperature when said valve is closed; and

means for removing said ferrate from said device;

wherein said means for removing is located at a site proximal to the site of use of said ferrate.